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A MESSAGE ON PASTURES AND COVER CROPS

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R. E. LAMBERT & SONS
GROWERS—MERCHANTS—IMPORTERS
DARLINGTON ★ ALABAMA

1938 CATALOG

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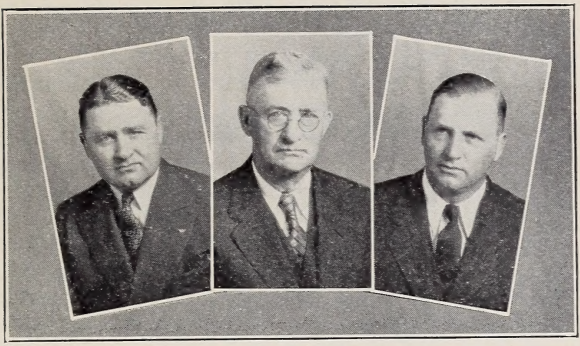


R. E. Lambert, Jr. R. E. Lambert, Sr. J. E. Lambert
founder

OUR PERSONNEL

R. E. LAMBERT, Sr., began this registered Hereford cattle, farming and seed enterprise in 1900. He has been a pioneer and leader in the South for improved pastures and livestock. Admitted two sons to partnership in 1924. Selected as one of Alabama's first 10 Master Farmers. Trustee of Farm Foundation.

R. E. LAMBERT, Jr. grew up with the business. Graduate in Agriculture of Alabama Polytechnic Institute. Now in charge of Seed Department, and has an intimate knowledge of Farm Seed adapted to the South.

J. E. LAMBERT also grew up with the business, and is Graduate in Agriculture of Alabama Polytechnic Institute. Now manages our farming operations, including seed and hay production, on our 2300-acre farm.

Backed by the many years practical experience and training of the members of this firm, and operating directly from our large seed and stock farm where many of our problems are the same as confront you, we feel unusually well qualified to try to aid our patrons. Our interest goes beyond getting your order. We want to help you choose the right plants for your purpose. We desire to make of you a satisfied customer for years to come. Our stock of field seed is one of the best and largest in the South. To serve you better, we have, early in 1938, completed the modern 1½-story office building pictured below. The cleaning plant and warehouses are nearby.

Southern Farmers and Their Great Job

Better Soils, Better Crops, a Better Living, Good Live Stock, More Timber, and the Best Citizenship—Our Goal!

WE ARE confronted with several big problems in this generation. The first, and greatest one, is to combat the destruction of our soils as a result of having planted too much cotton ever since the Civil War, which has left the fields exposed to washing and leaching rains each winter. This practice has exacted an exceedingly great toll from the South in the impoverishment of the lands. The remedy calls for the best that is in us.

Our National Government is trying to help in this in a large way. We are also fortunate in having many fine plants to aid us. One of the foremost of these is the lowly pine that should be grown on our most eroded and poorest lands. There will be a good market for all the timber we can grow. Paper mills and other industries are springing up to add to the demand. More industries in our midst will help us in the marketing of the diversified products of our farms and furnish employment for some of our boys and girls who are not farm minded.

In addition to what the production of timber can do to help correct the havoc which has been wrought by our heavy rainfall and our clean culture of cotton, we are blessed in having many legumes and other plants to gradually restore the soils from year to year, if we will only use them to the best advantage. This is the ONE BIG JOB of the South. Also, terracing is highly important. It is not the part of wisdom to try to rebuild our lands without constructing terraces where necessary to help protect them and hold the fertility. Terraces also help conserve the moisture for the crops.

The clovers, vetches, peas, beans, Kudzu, crotalaria, and grasses and other helpful plants, both summer and winter, should be

used liberally to help hold and improve the soils, and can often be made profitable for providing grazing, hay and forage for livestock, while restoring the land. Phosphate or basic slag are generally the only commercial fertilizers necessary, and they are inexpensive, of course.

The second big problem is to have something besides cotton as a cash crop for all of our farmers, large and small. This should not be difficult. The increased growth of cotton in Brazil and other parts of the world will make it more and more difficult to market big crops of cotton profitably, and the sooner we realize this, and prepare for it, the better it will be for us. We must also produce cotton of one inch and better staple. We can easily do this by selecting the proper varieties and have a high percentage of lint, also.

Hogs are a very promising part of our farming to both save and make money for us. If soybeans, peas, or peanuts are grown in our corn fields and hogs are used to harvest them, we can easily have plenty of meat to kill, and some to sell, and the lands will be helped, too. Personally, we prefer soybeans for this purpose because they produce a fine weight per acre of "hard" hogs, and with the proper selection of varieties there can be a long grazing season, with no rooting.

There are thousands of farmers in every state who have lands which should be put into permanent pasture, where beef and dairy cattle, horses, mules, hogs, and sheep can be produced profitably. Local conditions should be considered in the selection of the kind or kinds of livestock to be produced.

Here on "Greenlands Farm" we have hundreds of acres that would produce good cultivated crops that have not had a plow in them for years, because they pay us better in clovers and grasses.

Wonderful improvements can be made in nearly all pastures if the proper grasses and clovers are used, and weeds are mown at least once a year. If bushes and briars are present, they should be regularly cut. Many put only their poorest and least desirable lands in pasture, which should not be true. The pastures and livestock deserve some of the better soils. This policy will pay. Some phosphate applied to the winter clovers helps them wonderfully, and they in turn help the soils and grasses.

A reasonable cash income and a good living on the farms are most helpful in making our children better citizens whether they remain on the farm or go to the city to assume places of service and leadership. But yet, a great many who live on farms do not enjoy a good living, and this should make them ashamed. Most of the things which contribute to a good living at home do not cost a great deal, and can be had by nearly every farm family. Included are an all-year vegetable garden, a fruit and pecan orchard, chickens to provide plenty of eggs and meat, and one or more milk cows. To provide these things will bring greater health and happiness to the family and save quite a bit of money which would likely have to be spent at the grocery or market. In fact, many farm families have materially increased their income by having enough of these products to sell. Our County Agent paid his first year at college with a flock of chickens. This shows what we can do, if we will.

What are we going to do about these challenging problems of the South? The Southern States are badly behind other sections of the nation in many ways, and our farmers hold the future in the hollow of their hands as to how wisely they conduct their farms and help to prepare their sons and daughters for whatever they may do and wherever their vocations may take them—whether to the farm, into the office or into the home. There is no section endowed with better climatic and other conditions under which to work, or a finer people anywhere to do the tasks which are before us. Let us be wide-awake and meet the situation four-square!

Yours for service,

R. E. LAMBERT, SR.

DESCRIPTION OF PLANTS

(Read "Planting Instructions" on Page 42)

GRASSES

Bermuda Grass—This is a hardy perennial grass which grows from frost to frost and is dormant in winter. It succeeds on nearly all soils except constantly wet ones of the South, even if poor and sandy. Its chief use is for pastures, but Bermuda is also an excellent grass for summer lawns and golf courses. It grows well in combination with Dallis and other pasture plants. It is recommended as the foundation grass for upland sandy soils, but in such cases Lespedeza and one of the Bur clovers, White Dutch or Hop clovers, should be sown with it. The clover will give grazing, but, equally important, it will build up the land, and a greater growth of Bermuda will be had. Every 3-4 years it is advisable to apply basic slag or phosphate to the clovers. *This plan deserves serious consideration, and a trial.* Bermuda's strong root system helps prevent washing. Bermuda is usually sown in the spring, and plenty of moisture helps much in securing stands. For pastures, broadcast 8-12 pounds of good unhulled seed per acre. On lawns sow about 1 pound per 250 square feet, and cover very lightly. At least a third less seed can be used if they are hulled. Moreover, hulled seed usually germinate in 10 days, while the unhulled ordinarily require about 20.

Carpet Grass—One of the most popular pasture grasses in the lower South and Carolinas. It is not a good hay plant. It is permanent, and gives grazing about nine months of the year. Carpet withstands close grazing, and does not tramp out easily. It spreads rapidly. When well sodded, it crowds out weeds, but also some worthwhile plants. Carpet grass does not fatten stock as well as Dallis and a few others, but it merits an important place because it thrives on some types of land where other grasses do poorly. Most soils will grow carpet, though low, moist and cold sandy types suit it best. Seed are sown mainly in early spring, but may be sown successfully any month except in mid-summer. Carpet is not hard to start, but first quality seed should be used. A lot of carpet seed are low grade. Because this grass forms such a "carpet," it is being used

on many aviation fields, lawns, and golf courses. Sow 10-14 pounds per acre on pastures, and 1 pound per 225 square feet on lawns, etc.

Dallis Grass, or Paspalum Dilatatum— This plant may be rightfully acclaimed "the king of Southern pasture grasses," *because it comes nearer growing the year-round than any other grass whether in mild winter or dry summer, stock prefer it, it fattens better, it stops washed places more quickly, and when well sodded it will give more high class grazing than any other grass we know.* Unlike its close relative, carpet grass, Dallis allows its great companions—Black Medic, Hop, Bur, and White Dutch clovers, Lespedeza and Bermuda—to grow freely with it, and when well sodded and closely grazed, it largely chokes out objectionable weeds.

Threshing Dallis Grass seed on the 2300-acre Lambert farm. This is one of the principal seed crops grown.

Dallis is a permanent grass, and when once started, the job of planting is over. Its roots give succeeding crops whether seed are allowed to mature or not. It is not a pest. Cultivation readily kills it. After getting well established, Dallis is a rapid grower except in cold weather. With a few mild days in winter, its roots immediately send up new blades. This grass makes its fastest growth on moist soils, but gives satisfactory results on dry hill land also. Heavy soils are better for it than the lighter types, but it grows on all and is being established over practically the whole South. Besides being a superior pasture grass, Dallis is a fairly good hay plant. We are the pioneer growers of these seed in the South, but we also import some seed. The growth of the two is identical, but the imported seed are harvested un-

der more ideal weather conditions which often improves the quality. Imported Dallis seed cost more than the domestic, but usually fewer pounds may be used. The seed we grow are satisfactory, and are widely used. There is an art to harvesting, curing and cleaning Dallis seed which over 30 years experience has taught us. Customers are urged to be careful about the source of their seed.

Plantings are made the year-around, but principally in late summer and early fall, and in the spring commencing in January. Dallis comes up when moisture and temperature conditions are favorable. The seed sometimes germinate slowly, and it may be months before much grazing can be had, but the plant is none the less most desirable. Use 10-15 pounds per acre.

Italian Rye Grass—Is the ideal grass for winter and spring lawns, and is also very practical and popular for pastures. Dairymen and farmers are making considerable use of it to provide winter and early spring grazing. Splendid grazing is secured from mid-winter to June. Many are turning to this grass to help solve the winter pasture problem. Rye grass must be sown each fall on lawns, but it reseeds on pastures if not grazed too closely at seed maturity time in the late spring. However, the seed are inexpensive.

Cows grazing Italian Rye Grass in mid-winter on a well known dairy farm in Montgomery County, Ala. Grazing was begun January 15. The seed cost only $2.50 per acre. No land preparation required.

They germinate readily with ample moisture. Italian rye grass withstands winters almost perfectly, is deep green colored, and gives highly satisfactory results on lawns. Broadcast the seed on unprepared land, and

lightly harrow in, if convenient. On lawns, the preparation of the ground is the same whether there is a good Bermuda stand (which is the best hot weather lawn grass) on it or bare places beneath heavy shade. On mellow soils no preparation is needed—simply sow the seed and rake in. On compact soils it is best to loosen the ground with a rake or harrow, then sow the seed broadcast, and cover, or let the rain do it. A light covering of rich soil or fine lot manure will pay. Keeping the ground sprinkled insures quicker germination. Italian rye grass must be kept mowed on lawns in the spring to avoid shading the Bermuda too much. Late fall and early winter are the best times to plant. Sow 30 pounds per acre when planted alone on pastures, and 1 pound to 200 square feet on lawns.

Johnson Grass—This is primarily a hay plant, and as such is a splendid one. On fertile land, it usually gives a heavy tonnage of three cuttings of good quality hay, and should be cut when the heads appear. It is a perennial and does best on the heavier soils of the South. Plenty of moisture stimulates growth, but very wet soils are unsuited. Johnson grass is a pest on cultivated lands, but putting the lands in pasture largely eradicates it. It will not endure constant grazing. Turning and exposing Johnson grass to freezing weather kills it, also. Sow 20-25 pounds in the spring or summer, and harrow in. Plenty of seed pay.

Kentucky Blue Grass—Is used on pastures and lawns. It will grow on a variety of soils, but fertile heavy soils which contain **lime and phosphate**, or which can be fertilized, satisfy it best. This famous grass has its widest use in the upper South and regions further north. However, it is grown some in the lower South, and the use is increasing. Notwithstanding that Blue grass remains almost dormant in summer, **it is our best grass for shady lawns.** Bermuda is preferable in the summer where direct sun hits. While Blue grass likes shade, it is not vital to success. Pasture experiments in central Alabama have demonstrated that the aid of shade this far down is not essential to success provided phosphate is applied. Customers are urged to get some Blue grass started. We sell the very best grade of seed. Sow in the fall or early spring at the rate of

1 pound per 200 square feet on lawns, and 10-14 pounds per acre on pastures.

Orchard Grass—Is principally grown in the higher altitudes of the South, but not necessarily so. We have seen it do well in the lower South. It is splendid for grazing and fair for hay. Fall and spring sowings are made, but fall ones allow a longer grazing period. *Orchard grass is well adapted for winter growth.* It deserves wider use in programs for winter and early spring grazing. *It thrives in the shade.* Most soils suit this grass, and its heavy sod helps prevent washing. Sow 10-15 pounds.

Red Top, or Herds Grass—In some sections this is the leading grass, and like Dallis grass, it allows other worthwhile plants to grow well with it. Red top is especially adapted to marshy places and wet soils having an impervious subsoil. It makes a good growth on dry lands also. This grass has a place in many permanent pastures, as it comes early and continues its sturdy growth until late fall. Like the above grasses, Red Top stands close cropping, and tramping does not injure it. If used for hay it should be cut when it blooms. Sow 8-12 pounds per acre.

Sudan Grass—In general it is a cross between Johnson grass and sorghum, with many of the good characteristics of both and few of the objectionable ones. Sudan grass is used mainly as a hay crop, but is also grazed and used for silage. A field of this grass is very valuable to furnish temporary grazing during the summer, when the pastures run short. Under normal conditions, the growth is rapid. It is an annual, and is not a pest. Two to three heavy cuttings of hay are gotten a season, the feeding value of which is high, being equal to Timothy. Sudan grass is not exacting as to land, but well drained rich loams satisfy it best. It makes more and finer hay when sown broadcast, and harrowed in, but may be sown in rows. Sow in rows, if wanted for silage. Plant from April to August. Sow 20-25 pounds broadcast, or 8-10 in rows.

Wolf Tail Grass—As far as we know, we are the only source of this "evergreen" grass. We offered the seed first in the fall of 1935. The demand has since exceeded the supply. Wolf Tail possesses some rather un-

usual characteristics in that it remains green and growing the year-around, will thrive in the sun and shade, and succeeds on both heavy and light soils. Strange to say, stock is not so fond of this grass when other green pasturage is abundant, but eat it readily through the winter and early spring. We have known of cattle being wintered on it alone at the rate of two acres for each animal. The stand never gets so thick as to drive other desirable plants out. However, our experience to date prompts us to recommend that the principal plantings be where there is considerable shade, such as in scattering timber and on cut-over lands. Being a perennial deep-rooted sod or bunch grass, similar in this respect to Dallis, it is valuable in preventing soil erosion and catching up washes which have already started. Surely this plant is worth a trial. Plant 10-15 pounds per acre in the fall or spring.

CLOVERS

Alfalfa—An aristocrat among plants for it must have a fertile, well drained soil with some lime, phosphate and good inoculation. Soils best suited to its requirements are the friable ones of the lime belt, and the fertile clay loams of other sections. When the above conditions are met, alfalfa is undoubtedly the best legume we have for permanent meadows. Five years is an average period of life for a stand of alfalfa from one seeding. It will produce as high as 3-6 tons per acre of the best hay known in three to five cuttings. Alfalfa makes a very succulent and nutritious grazing plant for hogs, and one acre will carry 1,000 pounds. It remains green the entire year, but is dormant in winter. When soils and conditions permit, every farm should have a field of alfalfa for the splendid grazing it provides, and for the highly nitrogenous hay it yields. Two of the very best varieties for the upper two-thirds of the South are Kansas and Oklahoma, while Hairy Peruvian is fine for Texas, Louisana, and the southern parts of other Gulf states. It is popular in short rotations. Kansas alfalfa has consistently produced a heavy tonnage and given long life. Oklahoma runs it a close second.

INOCULATE ALL LEGUMES WITH
NITRAGIN
The Original Legume Inoculator

Sow 15-20 pounds per acre broadcast or in drills in September and October, or March and April, on a prepared seed-bed after it has settled well. Then cover not exceeding one-half inch. Inoculate with Nitragin "A."

Alsike Clover—A splendid reseeding clover that is not so particular about lime as some clovers are. *It is especially adapted to moist or wet soils.* Alsike is also good for shady places. It is valuable for pasture or hay, and is commonly sown in combination with Red Top and other plants. When so used, it greatly increases the yield. This clover is very resistant to cold weather, and is mainly grown in the upper South and the North. In the lower South, plant its excellent relative—Persian Clover. As with all clovers, better results are obtained by sowing after the first season in September, though plantings up to March are possible. If sown alone, sow 3-6 pounds. Inoculate with Nitragin "B."

Black Medic—A wonderful clover that is hardy enough to be grown at least as far north as the Ohio River and northern Oklahoma. It spreads very rapidly, and the only soils it will not thrive on, provided they are sweet, are the loose sandy and water-soaked types. Black Medic is especially adapted to the prairie or Black Belt lands of the South. Some stable manure is a great aid to getting it started. Phosphate applied in winter will cause it to at least double its growth and thus pay well, and by making the clover better, fertility is added to the soil to increase the growth of the grasses. Liberal mineral applications as above referred to do not have to be repeated each year. Black Medic may be sown from early September to March, the earlier the better. It yields an excellent quality of hay, and it has no equal for permanent pastures for late winter and spring grazing, dying down by July, and reseeding with the closest grazing. It can also be used to excellent advantage for cover crop purposes on cultivated lands, orchards, and meadows, maturing seed in May. This clover is now in much favor for lawns due to its spreading habit, growth in cold weather, and its deep green color. Sow 10-15 pounds on pastures. We usually offer both unhulled and hulled seed. The hulled cost more per pound, but there are more of them in a pound. Also, they can be cleaned better and

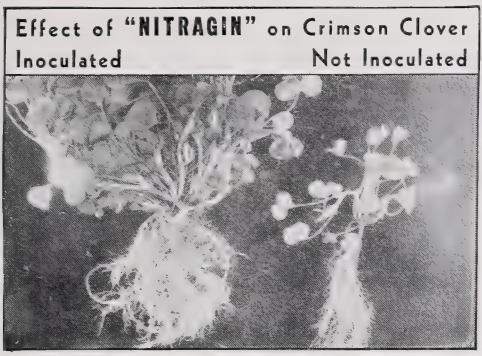
they come up quicker. Inoculate with Nitragin "A."

Bur Clover—We have three kinds—the old-fashioned Southern (spotted-leaf), Early Giant Southern, and California, and each has its advantages. All usually make vigorous growths and are used for pasture and cover crop purposes. The Early Giant is being used extensively in some sections as a winter cover crop because of its large growth and earliness for turning under in the spring.

While the seed cost runs some higher the first time than on most other legumes, one good seed crop will furnish seed for stands for 3 to 5 years with the land continuing in cultivation. Only those seed will come up which are worked to the surface. Another plan is to allow a few seed to ripen each spring before turning. Early Giant Southern is also fine on pastures, but Southern and California are favorites. Both kinds of the Southern are very winter-hardy, and the seed are regularly sold in the bur. We specialize in extra well cleaned seed weighing about 10 pounds per measured bushel. Many seed weigh 12-15 pounds because of the presence of dirt and rocks. Some say this dirt is needed for inoculation, which is not a fact. There are always enough soil particles in the burs to inoculate. California seed are usually always hulled. It costs less per acre to sow the California, stands the first year are easier to get, it grows off faster, withstands dry weather better, and stock prefer this kind. The Bur clovers are adapted to nearly all soils of the South—clays and loams in particular. They work exceedingly well in combination with Bermuda grass. These clovers reseed well late in May, even with close grazing. Fall plantings allow time for more growth, and this is highly important for cover crop use, but many seed are sown in early spring, also. Use 30-50 pounds of seed per acre of the Southern varieties, and 12-15 pounds of California. Inoculate hulled seed with Nitragin "A", but no inoculation is needed for seed in the bur.

Crimson Clover—Is a clover especially adapted to cultivated lands, and is quite popular, even though it must be sown annually. Seed are planted from early to late fall, and are harrowed in lightly when there is a season in the ground. Crimson makes a heavy tonnage and if cut for hay, should be cut

while in bloom. However, it is more often pastured some in winter and turned under in spring. Loamy and sandy soils suit Crimson best. Its greatest popularity is in Tennessee and adjacent territory. There is some art in



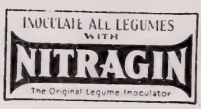
succeeding with Crimson, and inexperienced growers usually come out better with unhulled seed. Sow 20-30 pounds of them or 15-20 pounds of hulled seed. Inoculate with Nitragin "B."

Hop Clover, or Yellow Hop—This permanent pasture clover is a volunteer over a large part of the Cotton Belt. Hop seems to do equally well on Coastal Plain and Piedmont soils. The seed are difficult to harvest,

The third generation of Lamberts learning the seed business! This scene vividly illustrates the great value of phosphate on legumes. Both children are standing in Hop Clover. One plot had no phosphate; while the other did, and the growth was 4 times better.

and therefore expensive. However, a few will go a long way because they are very small. This clover spreads very rapidly. Hop is a very valuable pasture clover for late winter and spring. It is one of the earliest

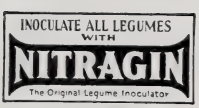
to give grazing, and is splendid in combination with Dallis, Bermuda, Lespedeza, et cetera. It is capable of producing first class hay, and it stands up better than many clovers. Hop responds well in increased growth to an application of 2-400 pounds phosphate per acre, as do all winter legumes. Be sure to try this splendid clover. It succeeds as far north as the Ohio River, Missouri, and northern Oklahoma. *Clays and loams that are not constantly wet satisfy it best.* Sow seed as early as convenient between early September and March. Use 3-6 pounds per acre. Inoculate with Nitragin "B."



Lespedeza, or Japan Clover—Under this heading we discuss the well known annual varieties, which are Common, Kobe, Korean, and Tenn. 76. Tenn. 76 is improved Common Lespedeza, but grows taller, making it a better hay variety. Because the plant is quite persevering, Common or Native Lespedeza is yet the most widely grown variety. However, Kobe and Korean make considerably more grazing and hay. Korean matures fully 30 days earlier than the others, and it is while Lespedeza is maturing seed that it fattens best. Therefore, Korean provides some high quality grazing that would otherwise be missed. It is especially popular in the northern two-thirds of the South, and in the Corn belt. Kobe makes the greatest growth of the four varieties, and thrives over the entire South. It and Tenn. 76 are very popular for hay. In an adjoining county, farmers and stockmen are often able to get one cutting of Kobe hay off of pastures where cattle are grazing and two per year off of meadows, though most sections get only one. A combination of 2 or 3 of these 4 varieties is ordinarily better than a single variety, and is strongly recommended to provide summer and fall grazing. When the amount of lime in the land increases, the size of Lespedeza decreases. Since acid lands are so common, it is very fortunate that here is a splendid legume which really prefers them. Incidentally Korean is effected less by lime than the other varieties. *Lespedeza—referring mainly to the Common, but including all varieties—is grown more extensively than any other Southern legume.* This is because it always reseeds, scatters well of its own ac-

cord on pastures and uncultivated lands, grows on most soils—including poor acid types, and requires no lime or preparation of the land. The value of lespedeza as a hay plant is increasingly appreciated, and it is often sown among small grains to good advantage. It will yield a cutting of choice hay in the fall, if on moist land. Phosphate or basic slag will greatly increase the growth. January through March is the usual planting season. On pastures sow 12-16 pounds of seed per acre, and 20-25 pounds for hay. Inoculate with Nitragin "L."

Lespedeza Sericea—Is a perennial (comes from the roots more than two years). This rather new legume is remarkable for its success on poor and acid soils. Some have called it "poor land alfalfa." It is a tall upright grower. The ability of this plant to improve soils where other crops might fail, and to produce heavy yields of hay, has been established. Unquestionably these are the chief uses of Sericea. However, seed production and temporary grazing are further uses. After establishing it, some have turned Sericea into permanent pasture, though it is not a common practice. Because the first season is devoted mainly to developing a deep root system, it may or may not be possible to get hay or grazing until later. Stems come from a "crown" or root. After the first year, many more stems come out, giving additional hay and seed. Two-year-old stands, or older, give one cutting of hay and a seed crop, or three cuttings of hay, usually. Since Sericea doesn't reach its best for a season or two, care should be taken to not start it on fields where it will be disturbed too soon. It withstands drouths unusually well. Hulled and scarified seed give best results. Plant about corn planting time, and later, on a prepared and pulverized seed-bed. If seed are what you want, plant 2 pounds of scarified seed per acre. Have rows 3 feet wide, and hills one foot apart, using 15 to 20 seed to the hill. For hay purposes, 12 to 16 pounds of scarified seed should be broadcast. Cover lightly. Keep down weeds the first year. Harvest seed in late October or early November when fully 75 per cent are brown. Cut the stalks with a knife or mower. Use a flail for small lots, and a thresher for large quantities. We strongly



advise scarified seed, and to further assure success, we urge inoculating them with Nitragin "L" inoculation. We have it.

Melilotus, Annual Yellow, or Melilotus Indica—Is one of the best winter cover crops for cultivated lands of the lower South. It is upright, and grows 1 to 4 feet tall, and will produce 5 to 10 tons of green matter by early May which may be easily turned under. Yellow melilotus produces fine quality hay and, if cut when seed start maturing, the land will be reseeded. It is a good temporary grazing plant that stock are foolish about when a taste is cultivated. This plant grows wherever fall sown oats withstand cold successfully, and it is often sown and cut with oats. It thrives best on soils with some lime, and will do well on acid soils if they are limed, which is inexpensive. Where lands are fresh and fertile, or have stable manure applied to aid inoculation in doing its work, results are practically assured. Phosphate is a great aid to this clover, and to all others. If a good yellow melilotus seed crop is turned under, the land may be reseeded three or four years from these seed. Only those come up which are worked near the surface in cultivation. This is a popular cover crop for orchards and groves. Disease does not affect it. Stands are easy to obtain on unprepared land. Sow 12-18 pounds, preferably in the fall, though early spring sowings are made. Inoculate with Nitragin "A."

Persian Clover—A relatively new plant that has won a place as one of our very best winter and spring clovers. It is well adapted for pasture and hay purposes in the lower South, especially where the land is wet and heavy. The growth of Persian is not restricted to such lands, though. It has a deep enough root system to provide sufficient moisture when moisture is not abundant. On good soils, the growth is usually exceedingly heavy, and splendid hay can be cut. It often grows 2 feet tall on meadows, or taller. It is a fine cover crop. Persian works well in combination with other clovers and grasses on pastures. Much work with it has been conducted over Louisiana by the Experiment Station, and the results are highly pleasing. Plantings should be made in the fall to allow time for the most growth, but

many sow in early spring. The seed are larger than such clovers as Hop and White Dutch, of which it is a relative. Sow 6-8 pounds, and inoculate with Nitragin "B."

Red Clover—Is a clover which deserves wider use. It is better known in the upper South than in the lower, but we have demonstrated on our south central Alabama farm that it will thrive in the lower regions. We recommend red clover chiefly as a winter and spring pasture clover and soil improver on meadows. Some use it for hay. If used for hay, Red Clover yields one to two cuttings. If fall sown, it makes a large growth, and makes it early. We have known of Red Clover getting large enough to furnish *fall grazing* which is unusual for winter and spring clovers. It is a biennial. Most soils, except strongly acid types, suit Red Clover. Sow 10-14 pounds in the fall or early spring. Inoculate with Nitragin "B."

Sweet Clover, White, or Biennial Melilotus—Is one of the best forage plants for lime or limed lands. It requires little drainage or preparation of the land, and is a splendid forerunner for alfalfa which it resembles in looks when small, and gives hay practically as good the first year. It is a biennial which comes from the seed one year and from a deep root system the next. It will reseed if allowed to. It may be planted on pastures or in small grain in the very early spring without preparation of the land. Here in the South two cuttings of hay are had the first year, and one cutting and a seed crop, the second, or grazing entirely, if preferable. Of course, it may be grazed both years and, if so, will furnish an enormous amount of non-bloat feed relished by all livestock, and the second year the roots put out early. As a pasturage plant, white melilotus is not permanent because stock do not let it reseed, but it may be sown every two years and used most successfully along with other plants. *No better bee plant is known than white melilotus,* and hence may have arisen its common name, "sweet clover." This legume is sown in the fall and spring. Unhulled seed are best for fall sowings, and hulled or scarified seed are best for spring plantings. Sow 14-18 pounds of the former, and 12-15 of the hulled seed. Inoculate with Nitragin "A."

White (Dutch) Clover—Is perhaps our one best and most practical winter and spring

clover for permanent pastures and lawns—considering its adaptability to a wide-range

Scenes like this of White Dutch can be duplicated all over the South—and wouldn't the cows like it?

of soils under varying conditions. It accommodates itself to nearly all soils of this country, from the Gulf regions northward, and is very hardy. It deserves more prominence and wider use here in the South. White Dutch is especially useful on sandy and other acid soils, and in this respect holds an advantage over Black Medic to which it is similar. It prefers lime lands, however, but isn't dependent on them. Sow in the fall or spring, the earlier, the better. Under favorable conditions this clover does not die down in early summer, but remains green until fall, and is ready for an early start. One of the splendid characteristics of White Dutch is that it will do well in the shade. This is especially desirable at times. Its companions for shady places are Kentucky Blue and Wolf Tail Grasses. While it thrives in the bottoms and on the uplands, White Dutch is partial to moist lowlands. When the land is good, and moisture adequate, the growth is usually rapid and abundant. We have been able to carry two or more cattle per acre in the spring on a bottom pasture in which White Dutch and Dallis Grass predominated. White Dutch is not easy to tramp out, and at the same time, it restricts soil washing and adds fertility. It is a splendid bee plant. *Some of this excellent pasture and lawn clover should be grown on every farm in the South.* The seed are hard to gather, but are so small that few are required per acre. Sow 3-6 pounds. Inoculate with Nitragin "B."

Austrian Winter Peas and Hairy Vetch for Soil Improvement

Alabama and Mississippi farmers are in the lead in using winter cover crops—particularly Austrian Peas and Hairy Vetch—but other Southern farmers are fast awakening to the great value of growing them. Because millions of pounds of these seed are sown in the South each fall is proof that great importance should be attached to a proper understanding of just what these legumes will do for a farmer, and to what he should do to be surest of success. To this end we are going to give some valuable space in this catalog to reprint the "SUMMARY" from Circular 74, issued August, 1936, by the Alabama Experiment Station, Auburn, in order that our customers may have the benefit of some of the best and latest experimental tests available. We quote, with permission, as follows:

"The results of field tests to determine the value of vetch or Austrian winter peas for increasing cotton and corn yields and suggestions for success with these crops are given and discussed. These results may be briefly summarized as follows:

1. Where cotton and corn were grown on respective areas each year, vetch or Austrian winter peas (turned under) increased the yield of seed cotton by 628 pounds and of corn by 15.6 bushels per acre.

2. The increase in cotton yield due to the vetch or Austrian winter peas was worth $3.78 per acre more than the increase from 225 pounds of nitrate of soda or its equivalent after considering the cost of the legume seed and the cost of the soda.

3. Where corn was grown without rotation and was preceded by vetch or Austrian winter peas, the cost of the increased yield was 16 cents per bushel.

4. Vetch or Austrian winter peas grown in a two-year rotation (cotton-winter legume-corn) increased the corn yield 18 bushels per acre at a cost of 14 cents per bushel. *In addition to the influence of the legumes on the corn crop, the residue the second year from these legumes increased the cotton yield by 213 pounds of seed cotton per acre.*

5. Vetch or Austrian winter peas, when not fertilized with a suffiicent amount of

phosphate, usually failed to make enough growth to economically increase cotton and corn yields; whereas, with a sufficient application of phosphate they made enough growth to greatly increase the yields of subsequent crops.

6. In order to furnish sufficient Nitrogen for the succeeding crop, it is necessary to turn under the tops of vetch or Austrian winter peas since approximately 90 per cent of the total nitrogen in the legume plant is in the tops at the proper time for turning.

7. The essentials for success with vetch and Austrian winter peas for soil improvement are:

(a) Early planting—September or first half of October.
(b) Planting as close as practical to the old cotton or corn stalks.
(c) Inoculation—if planting on a given area for the first time.
(d) Use 300 to 400 pounds of superphosphate or 600 pounds of basic slag per acre unless the land has been *well fertilized* with phosphate for several years.
(e) Turning under in the spring when the green tops harvested from 100 square feet weigh 15 to 20 pounds.
(f) Waiting at least two weeks before planting the succeeding crop."

It strikes us forcibly that if farmers are really farming for profit they certainly will not put off another year planting Austrian Peas and Vetch after studying conclusions 1 through 4 given above. Besides the more profitable yields following winter cover crops, crops grow off faster and save on cultivation expenses. *Why invest in nitrate of soda when winter legumes will gather nitrogen from the air at less cost? Moreover, the winter cover crops perform very important jobs commercial nitrates cannot do. They prevent most of the erosion from winter rains. They add much needed humus to the soil. Crops withstand drouths or wet spells much better when there is plenty of organic matter in the ground. Austrian peas and vetch will give some winter and spring grazing, if it is wanted. Grow your nitrates, and buy only phosphate, potash, and lime!*

Austrian Winter Peas—A leading and perhaps the most popular, winter cover crop

soil builder of today, but is closely rivaled by "reliable" hairy vetch. The Austrian pea is a kindred plant to English peas, but of much sturdier growth, and is very cold-resistant. It grows on most soils, including acid types, makes a vigorous growth, matures two weeks earlier than vetch, and makes a good temporary pasture in **late winter.** Austrian peas should not be grazed until they have made a good root growth. Broadly speaking, the lighter soils are best for peas, and the heavier ones for vetch.

Effect of "NITRAGIN" on Aust. W. Peas
Note amazing contrast...
NITRAGIN inoculation produces profitable crops and enriches the soil
NOT INOCULATED
INOCULATED

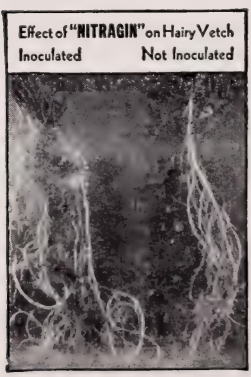
However, both legumes thrive on nearly all soils. Austrian Peas are usually ready to turn by late March. Small grains are fine to plant with them for grazing or hay purposes. Due to large size, 30-35 pounds of peas should be sown alone per acre, or 20-25 pounds with half the regular seedings of oats, rye, etc. Inoculate with Nitragin "C."

Cultural methods for Austrian peas and all vetches are the same. Uncultivated lands need preparation, but cultivated lands do not. In either case, cover 1 to 2 inches with sowings from early fall to winter. Early plantings give earlier and greater growth. Late sowings call for more seed than early ones. Increasing the quantities of peas and vetch 20-40% over what we suggest, will usually make it possible to turn the crops a week or ten days earlier in the spring. A popular method of planting is to broadcast the seed with Cahoon or Cyclone hand seed sowers, and cover with a middle-burster run shallow, a cultivator with small scooters, or a "Gee-Whiz" one-row harrow. The middle-burster is especially good on moist or wet lands. Doubtless the surest method of planting peas is with a drill, putting two rows of seed to each crop middle. Seed are easily planted where crops are unharvested, especially when cultivation is clean. It is absolutely necessary to inoculate seed when planted for the first time where peas or vetch have never grown successfully. No other farm crops inoculate for them. *The farmer who uses*

phosphate fertilizers on his cover crops will be well repaid by increased crop benefits. We vigorously urge that this advice be heeded.

The fertilizer manufacturers now make "non-acid forming" phosphate which will not injure inoculation, and basic slag will not. Acid phosphate will kill inoculation if exposed directly to it, so if it is used, it should be applied either below or above the seed. Further details about inoculation and fertilizers are under "Information." Also, be sure to read the six "essentials for success" put out by the Alabama Experiment Station under Item 7 above.

Hairy Vetch—*Is an outstanding and most reliable soil builder. It frequently costs a little more to use it, but it is so very dependable and easy to grow that many prefer to pay the difference and plant it. Hairy Vetch is gaining rapidly in popularity. Poor soils can soon be made rich with it,* and practically all soil types grow this variety. It is a favorite on the heavier lands. Hairy and Hungarian Vetches are extremely cold resistant, and *are decidedly better than Austrian peas for unfenced lands, where stock have access to the fields when the plants are young.* This is attributed largely to the habit of vetch being late making heavy growth. It may be eaten to the ground in winter, and come out all right by spring. On damp lands, it should be used in preference to Austrian Peas. Vetch is usually turned under in early April, when not left for hay along with small grains, and a good crop is equivalent to 250 pounds, or more, of nitrate of soda. Besides the nitrogen returned, valuable humus is put into the soil. *Plant according to directions for Austrian Peas.* While September and October plantings are recommended, sowings of vetch as late as December can be made. Vetch seed are smaller than Austrian Peas, and for this reason fewer pounds and less inoculation are needed per acre. Sow 20-25 pounds alone, or 15 pounds with small grains. Inoculate with Nitragin "C."



Hungarian Vetch—Is a favorite with many, particularly in the famous "Delta" of Mississippi, which extends 300 miles from Memphis to Vicksburg, and which embraces a number of counties. The Federal supported Delta Experiment Station, Stoneville, is carrying on extensive experiments with winter cover crops, and we understand that no plant tested by it has surpassed Hungarian vetch. At other experiment stations in Mississippi, Alabama, and other states, Hungarian has likewise given a good account of itself from hardiness and green weight per acre standpoints. *This variety is recommended for the alluvial and richer lands, and not for the poorer grades.* It costs less per acre to sow Hungarian than Austrian peas or Hairy vetch. Hungarian matures some earlier than Hairy, which permits getting the succeeding crop in earlier. It also makes more early growth to give grazing or to turn under than Hairy, although this tonnage may not be apparent to the eye. Sow 25-30 pounds of seed per acre, or 20 pounds when planting with small grains. Inoculate with Nitragin "C."

INOCULATE ALL LEGUMES WITH NITRAGIN The Original Legume Inoculator

Beggarweed—sometimes called "Florida Clover." This legume will grow on thin sandy lands, but, of course, will make a still better growth under more favorable conditions. Its principal use is as a cover crop for orchards, but it is also used as a grazing crop, to produce hay, and the seed as a feed crop for birds. The latter use of Beggarweed is growing, and sportsmen in practically all states of the South are sowing it. Plantings are made principally in April, May and June. Sow 6-8 pounds per acre in 3-foot drills and cultivate about twice, or sow 14-18 pounds broadcast. Inoculate with Nitragin "E."

Benne—Is used extensively on game preserves. Quail are very fond of it, and it is probably the very best feed that can be planted in the Southeastern states for doves. It is ideal for this purpose. The seed are formed in a pod, similar to a small pod of okra, and they drop to the ground the entire dove season, with just enough dropping to keep the birds coming. The seed are rich and oily. Other uses of them are for poultry, for cooking, in the manufacture of oil, and by

bakeries and confectioneries. Sow in late spring and early summer at the rate of 6-8 pounds in rows or 15-18 pounds broadcast, and cover lightly.

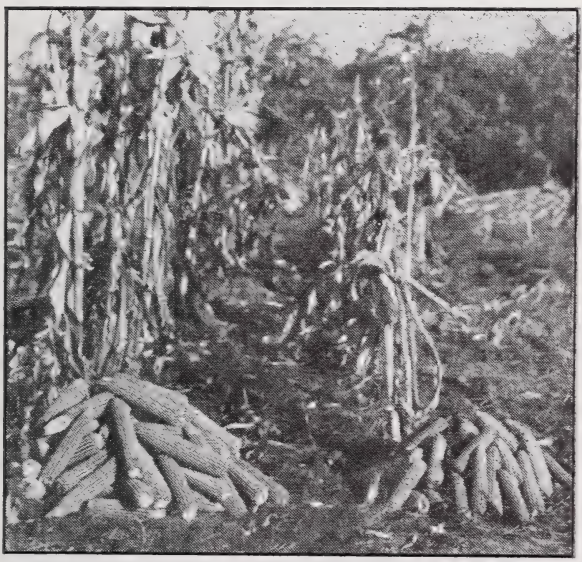
Cane or Sorghum—Should be planted on fertile soils for best results. **Texas Seeded Ribbon Cane** is the leading member of this family. It grows 10 to 12 feet tall, and makes a good yield of syrup or an abundance of ensilage. This variety is a favorite with dairymen. There is much confusion as to what is **Genuine** Texas Seeded, and farmers frequently do not get what they expect. We try to be very careful to secure the real article, and *our seed are grown from experiment station stocks.* The earliest sorghum is **Early Amber.** It is primarily a forage crop, and comes in early. It has helped many a man lay-by a crop when his corn was low. **Early Orange** is a little later than Early Amber, and produces a larger stalk. **Red Top** makes a medium sized stalk, a lot of seed, and is fairly early maturing. Cane plantings are made in 3-3½ foot rows at the rate of 8-10 pounds per acre.

Chufas—Are grown mainly in the lower South, and are considered one of the finest feed crops for fattening hogs. The meat is harder than that produced from peanuts. Chufas are also about the quickest crop to get ready for hogs, which can mean a lot in finishing them on time and in avoiding buying expensive feed. Hogs can often go on them in 90 days after planting, and by planting fields at different times, it is easy to have feed over a long period. It is a good idea to "ring" the noses of 8 or 9 out of every 10 hogs. These will fatten faster than the few that are doing the work of "rooting" for the bunch. Chufas prefer fertile sandy and loamy soils. Plantings are made from April through July in 2½ to 3-foot rows, with the hills 4 inches apart, and the seed being covered about 2 inches. Fertilization should be about the same as for cotton, using 200-400 pounds of 6-8-4 for maximum yields. Cultivation is similar to peanuts. We give 44 pounds for a bushel, whereas some sell only 40. Plant 1 bushel per acre.

Corn—Of the **standard varieties,** we handle such early kinds as **White Dent** and **Yellow Dent,** and such later maturing, prolific corns as **Douthit's, Hastings', Indian Chief, Jarvis Golden** and **Whatley's.** Douthit's,

Hastings' and Whatley's have white grains, while Indian Chief and Jarvis have yellow. Yellow corn has higher feeding value than white. The Alabama Experiment Station's tests show that Douthit's corn out-yields all varieties named above, with Whatley's and Hastings' showing up extra well. Probably more Whatley's is planted in the state than any other white corn with Indian Chief leading among the yellow kinds. Indian Chief yields better in the tests than Whatley's and Hastings' in north Alabama, but is slightly behind them in south Alabama. It is one of the earliest prolific varieties. Our Indian Chief was gown by one of the Experiment Stations. **Truckers Favorite** corn is early, white, and especially adapted for roasting ear use. Our **Pamunkey Ensilage** is recommended for silage purposes because it produces a very heavy tonnage. In getting out our seed corn, the ears are carefully selected, butted and tipped, and the corn is then machine recleaned. We try to give our customers pure seed which will produce high yields. We recommend treating corn with Semesan Jr.

Hybrid Corn. We offer this grown by T. W. Wood & Sons, one of the oldest and largest corn breeders in the U. S. We have two



Note greater yield, larger ears and stronger stalks of our Hybrid Corn over a good commercial variety.

kinds which are recommended for the Southeast—**Wood's Hybrid Golden Prolific,** which,

in comparative tests, is the highest yielding Southen yellow corn, and **Wood's Hybrid White Dent,** which is the highest yielding Southern white corn. Hybrid corn is a double cross made up by combining four different inbred strains and is not a variety cross. Two years are required to complete these crosses. The advantages of Hybrid corn over ordinary varieties are higher yields, deeper roots, more storm resistance, greater drought resistance, more vigor, and less disease. Because seed saved from a field planted with Hybrid Corn loses its hybrid vigor after the first year, new hybrid seed must be obtained each year. It requires expert experience to produce Hybrid corn, and it must be produced for a definite section. That intended for Iowa will not work in Alabama. *Hybrids should be planted one-fourth closer in the row than ordinary kinds. They will increase yields on poor lands, but make a still better response than standard varieties to fertilizer, good soils and careful cultivation.* Ask for our special folder for more information. Progressive farmers everywhere are turning to Hybrid Corn. It must be good to have gotten where it has! It is estimated that 35,000,000 acres of it will be planted in the U. S. in 1938. Our Hybrid Corn is treated with Semesan Jr.

Cotton—Nothing is more important in connection with producing cotton than to use pure, tested, high germinating seed of an adapted variety. We offer varieties that are the South's leaders—one for wilt and the other for non-wilt lands. It is highly important for farmers to secure fresh, pure seed every year or two representing varieties which will give a staple of 1″ to 1 1/16″. There is an over-supply of 7/8″ and shorter cotton, but a scarcity of 1″ and better, and it is what the mills want. It will pay you to grow it. The better staple will usually pay for the new seed the first year and leave a nice clear profit besides. The well-posted progressive farmer wouldn't any more grow his crop with Half-and-Half or some other short staple cotton than would the modern business man select the buggy as a means of transportation. Another step in getting greater profit out of cotton is to treat the seed with 2% Ceresan. Ask for the folder giving the full facts about this disinfectant. The cottons we offer have been thoroughly tried and proven by their reputable breeders,

experiment stations, and thousands of farmers, and they are, with some facts about them, as follows:

Coker's Clevewilt No. 6. Highly wilt-resistant . . . Productive and early maturing . . . Thin foliage . . . Storm-resistant . . . Lint turn-out, 36 to 38% (1,350 pounds seed cotton usually gives a 500-pound bale) . . . 1″ to 1 1/16″ tough staple that commands a nice premium . . . A very desirable, popular and dependable variety. Our Clevewilt seed are the first year from Coker (the breeder), and were grown in South Carolina. We were unable to find seed in Alabama of as good germination as we wanted, and we believe we now have the best quality in the state. The Alabama Seed Laboratory's germination test is 91%. Such seed are naturally worth more than 70% germintion seed—which is about the average this season, and in some sections the germination is averaging as low as 10 to 35%. It will pay big to get the very best seed money can buy, and we have them. Our strain No. 6 is newer and more improved than strains No. 4 and No. 5 that have been used the past several years. The breeder is constantly improving Clevewilt. All seed shipped from Darlington are recleaned. Most cotton seed sold are not recleaned.

D. & P. L. No. 11 and No. 11-A. Most popular and widely used varieties of cotton for non-wilt lands in the central South today . . . A high percentage of lint—40-43% (1,250 pounds seed cotton usually gins a 500 to 535-pound bale) . . . Pull 1″ to 1 3/32″ staple, which brings a good premium . . . Very productive and they lead all other varieties at many experiment stations . . . Early maturing . . . Scant folige and small stalks, which are very desirable under weevil conditions and where the crop is on rich or bottom land . . . Storm-resistant, yet picks easily. Our 11-A seed were produced by us and are only one year from the breeders, (and the breeders are not offering seed this spring at all because bad weather hurt the germination so badly). Our No. 11 is second year seed, and was grown in a one-variety community. The 11-A is the later introduction and possesses certain improvements over the No. 11, while the 11 is quite superior to other strains of D. & P. L., namely, No. 4-8 and No. 10. The rise of D. & P. L. No. 11 and No. 11-A to top places in the cotton world is the result of the

brilliant scientific work of one of the leading plant breeders of the South on the largest cotton plantation in the world. They have been bred to make the most money per acre for them, and they will do it for you. While not recommended for wilt lands, there is considerable wilt resistance in our two strains of D. & P. L. Our seed are recleaned, and they have been laboratory tested. If our 11-A had as good germination as the No. 11, we would naturally price it higher, but since it is lower, we are not.

Crotalaria—Was first introduced into Florida and is now regarded as the South's most valuable summer land builder because it suceeds on almost all soils, including poor sandy types, and because it makes from 15 to 25 tons of green material per acre in normal years on poor to average grades of land, which is equivalent to 500-1000 pounds of nitrate of soda, and because it will usually reseed itself if permitted to do so. It restores fertiliy easily, quickly, and economically, and is adapted for use by general farmers, tobacco growers, truckers and orchardists on their good and waste lands. One crop puts 3 to 4 times as much nitrogen into the soil as velvet beans do, not to mention the humus which is added if the crop is turned under. The way to build land fastest with Crotalaria is to turn under when blooming starts instead of after maturity. The extra humus gotten this way is worth far more than seed for the next crop would cost.

TABLE SHOWING VALUE OF THE DIFFERENT COVER CROPS

(Prepared by the Florida Agricultural Experiment Station)

Crop.	Dry Wt. Yield in tons (3-yr. Av.)	Lbs. of Nitrogen per Acre	Equiv. in Nit. Soda per Acre
Crotalaria	2.89	141.378	885 lbs.
Cowpeas	1.10	44.330	277 lbs.
Velvet Beans	.85	37.536	232 lbs.
Beggarweed	.62	17.890	112 lbs.

The possibilities of this crop are almost unbelievable. To give only one illustration: *if used on all corn lands it would in one year make the South a seller of corn rather than a buyer!* A chemical analysis on green Crotalaria above ground, based on only 23,391 pounds per acre, contained nitrogen, phosphoric acid, and potash valued at $21.91.

Not only is Crotalaria a God-send to the South, but its benefits are spreading to states beyond. There are many varieties, but the most important ones are **Late Spectabilis, Early Spectabilis** and **Intermedia.**

Germination is slow due to the very hard coat on the seed, and many will not germinate the first year. In fact, this allows the seed from a crop that is matured to furnish a volunteer crop for several years following. When planting for the first time, be sure to use **scarified** seed. Scarifying scratches or rubs this hard coat and allows moisture to enter the seed so as to get a uniform germination the first year. Some scarifiers do their work entirely too vigorously, and often actually impair the germination. We have a large and expensive scarifier which we consider ideal for Crolataria. We do not know of another machine like it in the South. *Buy only scarified and recleaned seed from a reliable source.*

Planting. There are several methods that are successful: (1) Drill in 3 foot rows, and cultivate once or twice. A one or two row planter with sorghum plate is the best way to drill. (2) Plant broadcast on well settled, plowed land, and harrow or roll in the seed with a packer. (3) Plant in growing corn on the row, following first hoeing, or broadcast in the middles ahead of the last cultivation, or you may also plant in alternate rows with corn. An application of 100-400 pounds of phosphate or basic slag will give splendid results, especially if the land is poor. Early plantings pay best, and should be made after

A field of the Crotalaria Spectabilis planted broadcast. Note the close, dense growth. The height averaged 6 to 7 feet.

frosts are over, or about cotton planting time. However, plantings can be made from then until the last of July. Cover the seed 1 to 2 inches. Good moisture helps give quick stands.

Growth. This plant makes slow growth for the first four to six weeks. Therefore, if planted in corn it will not curtail the yields. During July and August rapid rowth starts. Broadcast plantings have been found to be very effective in combatting Nut grass, and the U. S. D. A. recommends it for this purpose. It makes such a dense shade that many noxious grasses and weeds are smothered. Seed are produced during October and early November.

Inoculation. Soils on which Cowpeas, Peanuts, and Velvet Beans have been grown inoculate for Crotalaria. However, commercial inoculation is inexpensive, and we recommend it. Frequently a legume will make a big plant, but produce few or no nodules on the roots. Inoculation remedies such a condition. Treat Crotalaria seed with NITRAGIN "E".

Late Crotalaria Spectabilis is by great odds the most widely grown kind since it grows 5 to 8 feet tall and produces the maximum tonnage of organic matter to be turned under. The stalks are pithy and brittle, and are easily plowed under. They decay rapidly. If not turned green, Crotalaria should be turned under in December or January. Spectabilis has no value as a forage crop. Stock usually will not eat it. In fact, it is considered by some to be poisonous, but we have had cattle and sheep to eat it with no ill effects. The seed are black and kidney-shaped. Plant 7-10 pounds in rows, or 16-20 pounds broadcast.

Early Crotalaria Spectabilis is very similar to the Late variety described above, but the growth is usually less. It is recommended for the upper South, and for late plantings at the last cultivation almost anywhere. It matures seed 20 to 30 days earlier than the Late and usually reseeds ahead of frost. The stalks grow from 3 to 5½ feet tall, yet this is sufficient to furnish a bountiful supply of nitrogen and green matter which is evidenced by the following table:

	Average yield 1933-1934	
	Tennessee Valley	Sand Mountain
Corn after Crotalaria	40 Bus.	44 Bus.
Corn after no legume	12 Bus.	6 Bus.

These two sub-stations are located in extreme north Alabama, and these results are certainly significant. Another example of the outstnding value of Early Spectabilis is also had from the Sand Mountain Sub-station, Crossville, where Early Spectabilis was planted and 400 pounds of phosphate applied in 1932. This was done on land producing only 5 to 8 bushels of corn per acre. Since

This is a splendid and paying crop of Early Spectabilis. Note it is in rows. The height ran fully 5 feet.

then no seed have been sown or phosphate added. Each Crotalaria crop has reseeded. The average corn yield for the five crops is about 40 bushels. Could a simpler or cheaper land-building program be wanted? Another application of phosphate now would probably pay. The planting and seeding methods are the same as given under Late Spectabilis above. The seed are identical in looks, so be sure to buy from a reliable source in order to know that you are getting the variety that you want.

Crotalaria Intermedia is the only variety which is relished by livestock, and so is a dual-purpose variety. It makes more nodules than any other Crotalaria. The height averages 5 to 7 feet, and if turned under green, the weight runs from 10 to 12 tons. The leaves are long and narrow, the stalk finer than the other kinds, and these features contribute to the value of Intermedia as a hay

and silage crop. For hay, it may be cut when two feet high in July, leaving a six-inch stubble. It will resprout and usually give two more cuttings before frost. The seed coat is harder than on Spectabilis, so *we scarify twice to insure quick, uniform stands.* The seed are golden colored and half the size of Spectabilis; therefore, only half as many are required. For suggestions about planting, inoculation, fertilization, etc., see the information given above.

Egyptian Wheat, Shallu or **Chicken Corn**—A member of the sorghum family, the grain or seed of which is widely used as a feed crop for poultry and game birds. It is an abundant producer of white seed. Also, the seed and stalks are fed to cattle, horses, hogs, etc. The stalk is rather vigorous and tall. It stools out, and 3 or more stalks frequently come from one root. By cutting in the dough-stage, a second and perhaps a third crop can be produced under favorable conditions. Egyptian Wheat will withstand considerable dry weather. Plant 8-10 pounds to the acre in 2½-3-foot rows from April to July.

Millet—A well known variety is **Cattail or Pearl.** This millet is very valuable to furnish green forage. It will produce through the entire season, giving about four cuttings, if not allowed to go to seed. It comes in fine for dairy cows and other stock. The usual plan is to cut some of it daily, as required. Almost every farm needs a patch growing on good land near the lot or wherever stock are fed. Sow 8-10 pounds per acre in 3-foot rows. **Tenn. Cultivated or German Golden Millet** makes an abundance of hay in 6 to 8 weeks. Cut for hay when the heads begin to show. Sow broadcast on rich land at the rate of 50 pounds of seed per acre. **Brown Top Millet** was first introduced as a valuable hay crop, and it still is fine for this purpose. However, the main interest in it now centers around the fact that it is an excellent feed for doves, quail, and turkeys. A foremost authority has rated Brown Top Millet as "Number One Bird Food". If wanted for hay or grazing, it should be sown broadcast or in narrow drills at the rate of 15-25 pounds per acre and cultivated a time or two. Otherwise use 6-8 pounds. Plantings are made from April to July. Maturity is in 90 to 120 days depending upon the seasons.

Mung Beans—are mainly interplanted with corn for soil improvement. They are a good producer of nitrogen. They are also grown for hay. The beans make good chicken feed. Plantings are made from April to July. Because the seed of these beans are small only about 8 pounds in 3-foot rows are needed to plant an acre. Broadcast plantings are preferable for hay, and 20-25 pounds per acre should be sown. Inoculate with Nitragin "E."

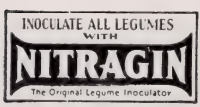
Oats, Rye, Barley, and Wheat—Are all fine to sow alone for grain, or with winter legumes to increase grazing and make more and better hay. Oats are also popular to sow alone for hay, and as grain they have a place on most farms for feed or as a cash crop. They can be produced cheaper than corn in many areas, and offer the livestock producer the best solution of his grain problem. The most popular variety from Texas to Alabama is undoubtedly the **Texas Red Rust Proof,** which Alabama Seed Laws prefer to call **Red Rust Resistant.** This variety is particularly a favorite in the Black Belt. It is very rust resistant, vigorous, and productive. We try to grow all of this kind we sell. We believe them to be as pure, clean, sound, and heavy as any grown anywhere and sold at any price. We sack them in new printed bags. The usual seeding is 2 bushels per acre. **Fulgrain** is the latest and most promising variety of oats developed by the famous Coker farms in South Carolina, and the name correctly suggests a heavy yielder of heavy grain. Fulgrain is extra early (5 days ahead of Fulghum and Coker's 33-50 and 14 ahead of Appler), is highly smut-resistant, is quite cold-resistant,

A bumper crop of Texas Red Rust Resistant seed oats being harvested on our seed farm. Modern machinery is utilized throughout.

shows 13% higher feeding value than the average southern oats, stools well, and has good stiff straw to give it storm resistance. This is the variety to plant if you have been growing Fulghums, etc. Sow 1 to 2 bushels per acre. We recommend treating seed oats with Ceresan.

Of the small grains, rye ranks next to oats in importance for the South, and **Abruzzi** is by great odds the most widely grown kind. It is unquestionably a satisfactory variety. **Balboa** is a fairly new kind with much promise. The general report of the Experiment Stations which have tested it is that it is fully equal to Abruzzi in winter hardiness and grazing ability and superior to it in yields. Rye will grow on poor lands. **Barley** is quick growing, and a good feed crop. Sow it only on fertile land. **Blue Stem Wheat** is a favorite in this part of the country for grazing or for grain. Wheat can stand more cold than any of the small grains. Sowings average 4 pecks of rye or wheat and 5 pecks of barley. See above about oats. Use a little over half these amounts with legumes. Applications of phosphate at planting time and nitrate of soda about March 1 usually greatly increase yields of all small grains.

Peanuts—A legume which is a cash crop from the sale of the peanuts, a hay crop, and a land builder. However, if care is not exercised peanuts will impoverish instead of enrich the land due to the temptation to market the crop and put nothing back in its place. Practically all soils, even the prairie types, will produce good peanuts, but the light, sandy types are preferable when growing for the market. Peanuts do best when following well fertilized crops. When not following them or when grown on poor soils, they should be fertilized at or before planting with 400 pounds of basic slag. **Runners** are the favorite for hogs, and many hogs are fattened on peanuts. The **Small White Spanish** is considered by many as the favorite kind to grow to sell to the mills, with Runners being the second choice and **Improved Spanish** the third. Frequently the Improved Spanish contain many "pops." This can largely be overome, however, by inoculating the seed with Nitragin "E". The quality and yield of all peanuts will be improved by inoculation as has been demon-



strated by tests. Thick spacing is essential for high yields. Plantings are usually made in 2-2½-foot rows at the rate of 50 to 100 pounds of unshelled peanuts per acre.

Rape, Dwarf Essex—Resembles Rutabaga turnips in leaf and stalk, but is more thrifty and rank. A crop is ready for grazing in 8 to 10 weeks, and is relished as green feed by all stock, but especially hogs and poultry. Rape is popular for "greens" on the table. It is sown from August to May. Fertile soils are required, and seed are sown in drills or broadcast like turnips. Sow 5-10 pounds.

Rice, Upland—Is used for general feeding purposes on the farm. Also, it attracts doves and other birds, but doves especially like it. Flooded lowlands are not necessary for growing this kind. Any fairly fertile land having a reasonable amount of moisture is suitable, and should produce 20 to 40 bushels of 44 pounds each. Plant from late spring to early summer at the rate of 3 pecks per acre in 2½-foot rows, or 1½ bushels if broadcast, and cover 1 or 2 inches. Fertilize the same as for corn.

Sagrain—Is a wonderful forage and grain crop which resembles sorghum in looks, but is a rival of corn in the production of grain and for ensilage purposes. *It will produce twice as much grain as corn under identical conditions,* and considerably more forage. Sagrain will grow on lands unsuited for other grain. It will thrive with excess rains or drouth when corn will not. It will do much to solve our feed problems, and is relished by all livestock and poultry. The grain has 90 per cent of the feeding value of corn, pound for pound. When the heads mature, they may be cut with knives and fed to live stock and poultry with or without being threshed. The stalks are relished by stock. They are cut easily with a hoe or "poor man's harvester," and should be stored in a shed in an upright position. Plantings are made from April to August. Nearly all soils suit Sagrain. **Grohoma** and **Hegari** are kindred and similar crops. Practically all said about Sagrain is true of them. Hegari is the earliest of all, but the seed or grain has less weevil-resistance. Hegari seed are white, while Sagrain and Grohoma are brown or golden and, therefore, have higher feeding value. Drill 4 to 5 seed 9-10 inches apart in rows 3-3½ feet wide. Stands should be thinned to

about 2 stalks per hill for the most grain. Sow 8-10 pounds seed per acre.

Sesbania Macrocarpa, or Indigo Plant— Has been a volunteer summer and fall legume in many waste places of the South for years. Now, besides being fine on many "thrown-out" lands, it is a wonderful and popular summer soil builder for farmers and growers of cantaloupes, lettuce, Irish

Does this mass of vegetation look like a lack of fertility and humus for the next crop? Crotalaria is in the foreground, while the tall legume in the rear is Sesbania. The picture was made at Versailles, Ky., on October 3.

potatoes, citrus fruits, etc., from southern California to South Carolina. Although a warm weather plant, good results have been had as far north as Oklahoma and Kentucky, and points higher up. Being a very rapid and quick grower broadens the field of use. The heavier bottom soils suit Sesbania best, but it will succeed on other types, even though they be quite dry or wet. Some cultivation and fertilization helps on the lighter, upland soils. Most plantings are made broadcast with no other crop being on the land at the time, but another good practice is to sow the seed just ahead of the last plowing of corn, etc. The earlier the "laying-by," the better. Naturally, greater benefits in nitrogen and humus are obtained by turning the crop green, and on good land, this is possible in 8 to 10 weeks after planting when the stalks are usually 6 to 10 feet tall. The stalks decay rapidly. *Sesbania is the greatest nitrogen gatherer of which we know.* When grown for soil improvement, the nodule development will be surer and greater by inoculating the seed with Nitragin "Sesbania" inoculation. It is now offered at the same prices as culture for cow-

peas and soybeans, which are low. It is possible to have a fine plant growth and there be few or no nodules formed on the roots. Inoculation prevents this. The cost is small, and the benefits usually large. Plantings run from April to mid-July. A fair stand can be had from broadcasting 15-20 pounds per acre, but truckers who want thick stands should sow 30-40 pounds. Cover about one inch, when convenient to cover. *Care should be observed, though, to plant scarified seed ONLY. The Sesbania seed coat is very hard, and only* 10% *of unscarified seed may germinate the first year. We recommend and sell scarified seed.* This plant is not a pest. Cultivation readily kills it.

INOCULATE ALL LEGUMES WITH NITRAGIN The Original Legume Inoculator

As a quail feed Sesbania is unexcelled. Where quail are scarce, sportsmen would do well to follow the successful plan of the famous 12,000-acre Maytag Preserve, "Sedgefields," Union Springs, Alabama. Let Mr. Geo. L. Harden, Jr., Manager of this preserve, briefly tell the story, thus: *"Through observations made on the Maytag Preserve the most important factor to be considered in making quail abundant is a plentiful supply of feed, not too far removed from sufficient cover. By the process of opening the craw of all birds killed and by experimenting with the planting of different seed it was possible to determine the kind of feed quail like best. After careful consideration over a number of years the conclusion was reached that Sesbania is the most suitable seed to plant. It grows well on most any type soil, produces large quantities of seed and quail will eat it in preference to any other feed. This has been satisfactorily proven."* Just enough seed fall from the pods to give feed continuously from late fall to spring. Sow about 25 pounds per acre from April through June, preferably early in the upper South and preferably in long strips 30 feet wide, but also in patches, along edges of fields and ditch banks, and almost any waste places. It is desirable to lightly disc or harrow the seed in, but often no covering or other attention at all is given. Sesbania is easy to grow. It thrives best on moist, heavy lands. *Another use of Sesbania is for duck feed. It succeeds in marshy places, and will actually grow in shallow water around*

ponds and lakes. Sow the seed around the edges when the water is low. When it rises, it will not bother. Ducks also eat the bark off of the stalks.

Soy Beans—This legume is one of our most important soil building and forage crops, and while it is grown extensively, it should be grown more extensively. There are many varieties, and all of them are splendid to plant alone or with corn and other crops, but some varieties are better adapted for certain other purposes than are others. Of the kinds we sell all can be used for hay and as feed for hogs, but **Mammoth Yellows, Mamloxis** and **Biloxis** are the preferable kinds for hogs, while **Avoyelles, Laredos, Otootans,** and **Tokios** are the leading hay varieties. The Mammoth Yellow is early, and hogs can usually be turned on them by late July or early August. The Mamloxi is medium early and the Biloxi a late kind—being about 25 days behind Mammoth Yellows. All of these are splendid, and the Mamloxis and Biloxis do not shatter their beans. For a number of years we have fattened hogs on soybeans and a little corn. We use Mammoth Yellows for the hogs to go on first and then have fields of Biloxis to turn them on when the Mammoth Yellows have been eaten up. This gives grazing for a long period. Soy beans make hard pork, and this has proven to be our cheapest method of fattening hogs. The Tokio is very popular in the Carolinas and other parts of the South, while Avoyelles were originated in Louisiana and have proven very popular there and elsewhere. The Laredo is popular because it is reasonably early, an abundant bearer, and will produce well under favorable conditions. The Otootan is a late variety, but is generally conceded as the South's best kind for hay. It yields a large quantity that is fine-textured and many sections place their dependence on this kind for hay. It is the best variety on the poorer soils. It is also the best one for grazing. Otootans, Laredos, Mamloxis and others produce ideal bird feed.

Experiment stations and leading soybean producers in Illinois, Arkansas, and other states have learned that heavier seedings than were formerly made give larger yields. Large seeded varieties such as Avoyelles, Biloxis, Mammoth Yellows, Mamloxis, and To-

kios should be sown at the rate of 3 pecks per acre when planted in 3-foot rows or at the rate of 4-6 pecks if sown broadcast for hay. Laredos and Otootans are small seeded varieties, and 1-1½ pecks will plant 1 acre in 3-foot rows, or it will take 3-5 pecks per acre for broadcast seedings, depending on the fertility. The land should be at least reasonably fertile for all broadcast seedings. Plantings are made about as early and late as for corn. For best results fertilize with 300-600 pounds basic slag or 200-400 pounds superphosphate. Experiments have definitely proven that greater yields of beans and hay can be produced if the seed are inoculated. Without inoculation the plants may appear thrifty, but produce no nodules. Nitragin "S" is cheap and the kind to use.

Velvet Beans, Early Epeckled or 90-Day, and Bunch or Bush—The former is a running bean, and the most widely used variety. However, Bunch velvet beans are gaining in popularity, especially for use on rich lands where the running kind makes an excessive vine growth which wraps up the corn badly. Being vineless, this variety can be used advantageously with other crops besides corn, as well as in orchards. It can be utilized for hay and green forage. Some can be cut daily with a hoe. Bunch velvets will make when planted as late as May and early June, but for best results, plant both varieties earlier. We want to caution our customers that we exercise extreme care in the selection of our Bunch Velvets, but that regardless of who grows or sells them, there is always some danger of them reverting to the running kind, especially when planted on rows with corn where it is easy for them to run up on the corn. We therefore will not guarantee Bunch Velvets not to run. To avoid any risk, plant soy beans instead. They never run. They are fine. Velvet Beans are extensively interplanted with corn. They are wonderful soil builders, and valuable producers of fall and winter feed. The seed of the two varieties are identical in appearance. The usual planting is one peck per acre. If you wish to inoculate, use Nitragin "E."

Wild Winter Peas (Lathyrus hirsutus)—This unusual legume appeared in one of our hay meadows about 8 years ago. For several years we did not realize its possibilities, but during the last few, our observations have

caused us to rank it very high as a winter grazing and very early spring hay plant. At present we have about 400 acres in Wild Win-

Wild Winter Peas on our farm in mid-April. Note the dense growth.

ter Peas. We graze stock on them until March 15 or April 1, then take the stock off and get a cutting of high quality legume hay about the middle of May. Following cutting the hay, the peas grow out sufficiently to produce enough seed to shatter and reseed the land for the fall crop. Their reseeding ability is outstanding. Today it is still growing where we first noticed it 8 years ago. We can recommend it for every acre of stiff soil in the South.

Our experience has not included the lighter, sandy types, though we believe it will succeed on them. We do know that it does well on both wet bottoms and uplands. The soil building value is splendid. Cuttings of hay following a good crop of these peas are usually luxuriant. A good stand of these peas on good land will afford abundant grazing from December until March or April, and stock seem to relish it in preference to many other plants. This pea does equally well on lime or acid soils. Applications of slag or phosphate will pay. A visit to our farm from December to May will convince you of the possibilities of this plant. Every live stock and hay grower can cut down his feed costs and step up his production with a liberal use of these Wild Winter Peas. Plantings should be made from September through December, the earlier the better. Broadcast 15 to 25 pounds per acre. It is not necessary to prepare the land, but we recommend harrowing or lightly discing the seed in, if convenient. Inoculate with Nitragin "C" for best results.

WHAT TO PLANT

For Winter Cover Crops—The leading ones are Austrian Winter Peas, Hairy and Hungarian Vetches, Crimson Clover, Early Giant Southern Bur Clover, Persian Clover, Wild Winter Peas, Annual Yellow Melilotus, rye, oats, barley, and wheat. Others are Rape, Southern and California Bur, Black Medic, White Dutch, Hop, and Alsike Clovers.

For Summer Soil Improvement Purposes—Crotalaria, Sesbania, soybeans, velvet beans, cowpeas, peanuts, Lespedeza (all kinds), Beggarweed and Mung beans.

For Permanent Pastures—The most widely used ones in the South are Dallis, Bermuda and Carpet Grasses; Common, Kobe, Korean and Tenn. 76 Lespedezas; White Dutch, Black Medic, Persian and Hop Clovers. Other important ones include Wolf Tail, Red Top, Orchard and Kentucky Blue Grasses, and California Bur, Southern Bur and Alsike Clovers. Italian Rye and Rescue Grasses belong in this group, if not grazed too closely at seed maturing time, so as to permit reseeding.

For Temporary Pastures—The principal ones are small grains, Italian Rye Grass, Sweet Clover (White Melilotus), Yellow Melilotus, Wild Winter Peas, Lespedeza Sericea, Crimson Clover, Red Clover, soybeans, Sudan Grass and Kudzu. Other worthwhile ones are vetch, Austrian Peas, Johnson Grass, Rescue Grass, Crotalaria Intermedia, Brown Top Millet, and Beggarweed.

For Hay—The chief plants include Lespedeza Sericea, Kobe and Tenn. 76 Lespedeza, Otootan and other varieties of soybeans, Sudan Grass, Johnson Grass, Alfalfa, Yellow Melilotus, Sweet Clover, Red Clover, peanuts and Wild Winter Peas. Other important ones include Crimson Clover, Crotalaria Intermedia, Black Medic, Persian Clover, Beggarweed, Mung Beans, and Red Top, Dallis, Orchard, and Rescue Grasses. Tennessee and Brown Top Millet are used considerably for hay in some sections. Fine hay is gotten from a combination of Austrian Peas, Vetch, or Yellow Melilotus with oats, rye, barley, or wheat. Add plenty of grain to the mixture.

For Grains and Forage—Corn, oats, rye, barley, wheat, soybeans, Early Speckled and Bunch Velvet Beans, cowpeas, Egyptian Wheat or Shallu, Sagrain, Grohoma, Hegari, all millets, all canes or sorghums, Mung Beans and Upland Rice.

For Lawns—Buy Italian Rye Grass (the best winter and spring grass), Bermuda Grass (the best summer grass), Kentucky Blue Grass (for shady places), Canadian Blue Grass, Black Medic, White Dutch Clover, Hop Clover, and for certain purposes (golf courses, aviation fields, etc.), Carpet, Dallis and Orchard Grasses.

For Feed For Birds—In their possible order of rank we recommend Sesbania, Benne, Brown Top Millet, Beggarweed, Egyptian Wheat or Shallu, Upland Rice, cowpeas, soy beans, Lespedeza, Cattail Millet and Sagrain. The peas usually furnish feed in the early fall before other crops have ripened.

GENERAL INFORMATION

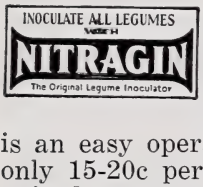
Planting Instructions—Are not considered necessary for small grains, sorghums, millets, corn, cotton, cowpeas, soy beans, velvet beans, etc. However, we have given planting suggestions and instructions in the foregoing descriptions where we feel they are especially needed. In the case of many of the grasses and clovers we sell—which are principally pasture plants—no preparation of the land is essential. However, this does not mean that a drag harrow run over the surface once or twice, preferably after sowing the seed broadcast, will not pay. It should be done whenever convenient, and it is especially desirable where a sod is on the land, which might prevent the seed from making good contact with the soil, or the surface is sloping, and drifting of seed by rains might occur. We have sown pastures and fields many times without doing anything besides scattering the seed by hand or with a Cyclone or Cahoon seeder. It is cheaper, and usually better, not to plow for pastures, but if it is done then *the soil should be allowed to settle before the seed are sown—since a firm seedbed is essential to success.* Be sure not to get small grass and clover seed covered over one-half inch at any time. If it is desirable to plant Yellow Melilotus, Lespedeza or some other clover, with small grain, sow the grain in the usual way, and scatter the small seed over the surface.

Pasture seed are usually sown broadcast, but planting in shallow drills (without covering), and putting out in small piles are good methods, also. The latter plan can hardly ever fail if fine barnyard manure is mixed with the seed, and seed requiring inoculation are well inoculated. Seed sown in drills and piles are longer giving maximum grazing than if broadcast, however. Those who sow only one grass or clover, and expect a satisfactory pasture, will usually be disappointed. A combination of at least two grasses and two clovers should be used, even if all are not sown at one time, or in one year. It usually takes 25-35 pounds of seed per acre to give a good start and provide a variety of grazing.

Do some experimenting every year. *Increased plant growth due to liberal seeding will pay many times over whether enriching land or feeding stock. Do not be sparing*

with seed. Furthermore, it is the exception and not the rule, when a good permanent pasture is established within six months. It should improve each year.

Inoculation—Isn't merely advisable, but is necessary for most legumes unless being planted on land where kindred crops have been recently grown successfully. Even then, money spent on inoculation is good insurance. *Poor inoculation, or no inoculation, is responsible for more legume failures than any other cause.* Often farmers do not realize the importance of inoculation, and omit it, to their regret and loss. Good inoculation prevents a sickly growth after germination, and insures a better stand and yield. It pays well in producing larger crops. Soy bean yields are often increased 25 to 100 per cent by inoculating the seed. It is an easy operation, and the cost averages only 15-20c per acre. Some double the required amount of inoculation to be on the safe side. *Both Southern Bur Clovers carry their inoculation in the burs, but no other clovers do. Lespedeza is usually not inoculated except in Western Texas and Oklahoma, though Sericea should be everywhere. Vetch, Austrian Peas, Crotalaria, Sesbania, Wild Winter Peas, Mung Beans, Beggarweed, Black Medic and all other legumes require inoculation, unless the soil contains the proper bacteria. Soy Beans and peanuts should be inoculated. No grasses, small grains, Rape, cane, millet, corn, cotton, Chufas, Upland Rice, Benne, Sagrain, Grohoma, Hegari or Egyptian Wheat need inoculation.*



We sell NITRAGIN INOCULATION, "The Original and Dated Inoculator" put up in handy tins. The culture groups or "families" are given on the backs of all of our price lists.

Legumes NOT INOCULATED are "SOIL ROBBERS"—take more plant food out of the soil than corn or any other grain or grass crop.

Legumes WELL INOCULATED are "SOIL BUILDERS"—restore, maintain and build up soil fertility.

When ordering, be sure to specify kind of seed to be inoculated. The various kinds of NITRAGIN are put up in different sized cans, and our price lists quote. Seed may be inoculated with soil, and the usual rate is 1 pound for 5 pounds of seed. Soil on which a legume has reecntly grown successfully will inoculate for all legumes in that group. Soil inoculation is not greatly used now because the commercial is cheap, easier to use, and much surer of success. Moreover, there is danger of parasites and other contamination from the soil, and we do not now recommend it.

How to Inoculate—Each can of inoculation has these simple directions on it: Place seed on floor, on canvas, or in tub. Mix contents of this can thoroughly with water. Large seeds (Soybeans, etc), require about 1 pint of water per bushel of seed. Small seeds (Alfalfa, etc.) require about 1 quart of water per bushel of seed. Pour NITRAGIN mixture gradually on seed. Mix well until all seeds are thoroughly coated with the black substance. Seed will dry in a few minutes. PLANT AS SOON AS POSSIBLE. If soil is used, *it should be dry* and pulverized, and be stirred into dampened seed (not wet). If the soil is sandy, some syrup or glue in the water will cause some soil to stick to every seed, which is the desired objective.

DU BAY SEED DISINFECTANTS

Ask for Folder Telling How to Use.

The Du Bay Disinfectants are offered for the disinfection of corn, wheat, oats, barley, cotton, potatoes, vegetable, flower, and other seed to control disease organisms carried on

the seed; to prevent seed from rotting under unfavorable soil conditions; and to inhibit early damping-off of seedlings. Seed treatment with Du Bay Disinfectants usually results in increased stands and yields. Literature telling the functions of and how to use the proper disinfectant for the kind or kinds of seed in which you are interested will be cheerfully furnished upon request.

The cost of using Du Bay Disinfectants is practically nothing compared to the benefits. For example, 2 cents a bushel pays for Ceresan for oats, 10 to 15 cents a bushel pays for 2% Ceresan for cotton, and for corn the cost runs about 1 1/5 cents per acre.

Almost every Experiment Station in the country has proven the great value of treating seed with these well known disinfectants. In 1937, the North Carolina Experiment Station made 9 tests with cotton seed treated with 2% Ceresan (mercury dust) as compared to untreated seed. The treated seed averaged 267 pounds more cotton per acre. *You cannot afford NOT* to treat your seed.

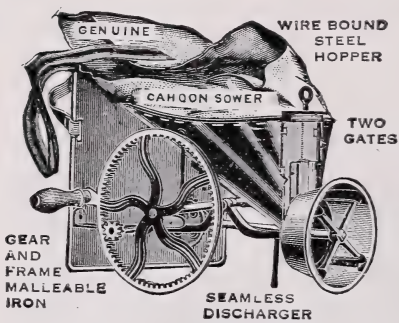
New Improved Ceresan increased the yield of oats 19.1 bushels per acre.

Prices on the different kinds and sized cans of Du Bay Disinfectants are given on the backs of all of our price lists. We are one of the few jobbers which the manufacturer has appointed in the South, and we carry a large stock at all times from which to serve our customers.

Fertilization—Has a tremendous effect on legumes. Results are impressive from applications on cover crops and pasture clovers. Better clovers mean richer lands; richer lands spell better grsses. *First in importance is superphosphate (acid phosphate), second, lime, and third, stable manure.* All soils need 2-400 pounds phosphate per acre for legumes, or 4-600 pounds basic slag, unless they follow a crop liberally fertilized with phosphate. *Increases in green matter*

of 100 *to* 300% *are common from such applications.* It is best to apply basic slag on lands deficient in lime, and phosphate on the soils containing lime. Basic slag has some lime in it, and may be put out with and when the seed are, *but plants should be up when phosphate is applied, unless contact with inoculated seed can be avoided, or unless "Non-acid Forming Phosphate" is used.* Straight acid or superphosphate will kill inoculation. *All lime loving plants can be grown on acid soils. The plan is simple and inexpensive. The seed are treated with double the usual amount of inoculation, and basic slag is applied liberally.* This important discovery has been verified by 20-odd experiment stations of the country.

HAND SEED SOWERS



Cahoon— Durable and dependable for sowing Austrian Peas, Vetch, Oats, Lespedeza, grass and clover seed, etc. Adjustable for different sized seed. Capacity, 3/5 bu. Shipping wt., 8 lbs.

Prices: $4.40 *f.o.b. here;* $4.75 *postpaid.*

Cyclone—Fine for sowing all large and small seed which are commonly broadcast. Simply constructed, easily operated, and very popular. Has adjustable feed gate. Oscillating feed plate wont clog. Capacity ½ bu. Shipping wt., 4 lbs.

Prices: $2.40 *f.o.b. here;* $2.65 *postpaid.*

Prices—Are subject to change without notice and stocks being unsold. Our latest price list is sent with this catalog, and we issue new ones monthly during main seasons. We are glad to furnish current quotations at any time, but do not attempt to send them voluntarily to our entire mailing list. *Being farmer-seedsmen, with many over-head expenses eliminated, we can and do sell below the market usually. However, it is not on*

the basis of price alone that we solicit your business, but on **Quality** *and* **Service.**

All prices are f. o. b. our shipping points, Estelle and Camden, on the L. & N. R. R., or point of no higher rate, unless otherwise stated.

Quantity Prices—We try to give reasonable price concessions on large lots, and invite inquiries. Ask for delivered quotations.

Terms—We can give better prices and service by requesting *cash with order.* Remittances should be made by money order, check, draft or money by registered letter. Stamps wrapped in wax paper are acceptable for small amounts. Shipments may be made C. O. D. or B/L attached, but we urge customers to send money in advance to save collection charges. Agricultural colleges and others operating under similar systems are accorded the buying privileges with us, to which they are accustomed.

Non-Warranty—We give no warranty, expressed or implied, as to description, quality, productiveness, or any other matter of seeds or plants we send out, and will not be responsible for the crop. When given, purity and germination figures are for information only and without guarantee. No responsible seedsman gives any warranty because most of the failures are due to unfavorable weather or soil conditions, too deep or too shallow planting, unsatisfactory inoculation, etc., all of which are beyond his control.

How to Wire Us—Our phone number is 1011. Camden, Ala., is our telephone exchange and Western Union office. Selma, Ala., is our Postal Telegraph office. There are no extra chares for phoning wires to us from either place. *Customers are respectfully requested not to wire us collect, particularly when asking for quotations. Our prices do not allow for this expense.*

References—City National Bank of Selma, Ala.; Camden National Bank, Camden, Ala.; Dun & Bradstreet, Inc.; and many agricultural leaders throughout the South.

Transportation to Use, and Rates—Parcel post is cheaper than express for small quantities, and larger amounts often go economically by it. 70 pounds may go in one package—150 miles for 84 cents, 300 miles for $1.47, and 600 miles, for $2.52. *Seed are in-*

sured when money is sent for it. Seed take the 2nd class rate by express, and for this reason many customers use this quick service for medium and large orders. Many express agents do not handle seed often, and do not know that the 2nd class rate applies. Customers are urged to ask their agents about the express rate charged. *There are now express rates on seed between many points as low as 3rd class freight. Your agent can tell you whether your town is one of these points.* If you are not rushed for seed, freight is the cheapest transportation on 100 pounds or more, and sometimes on less. Most seed take 3rd class freight rates. Some seed which are entitled to 4th class (lower) rates include Sudan Grass, Johnson Grass, Sagrain, sorghums, and peanuts. Austrian Peas and cotton seed take 6th class. Soybeans, velvet beans, Mung beans, and cowpeas take the 8th. Corn, oats, rye, barley, and wheat take the 10th class, (the lowest). All 6th, 8th, and 10th class items take the 4th class rate if shipments cross the Mississippi River. *We will gladly furnish any freight, express, and parcel post rates. Delivered prices will be cheerfully furnished at any time. Do not forget to tell us how and where to ship.*

NOTICE—If seed are to be sent prepaid, or by parcel post, be sure to allow money for the purpose unless you do not mind the C. O. D. fees, as we cannot charge these small amounts. Consult your agent or postmaster for rates, or let us give them.

PARCEL POST RATES From Darlington, Ala.		Postage For First Pound	For Each Additional Pound Add
First	Zone within 50 miles	$0.08	$0.01
Second	Zone within 50 to 150 miles	.08	.01
Third	Zone within 150 to 300 miles	.09	.02
Fourth	Zone within 300 to 600 miles	.10	.03½
Fifth	Zone within 600 to 1000 miles	.11	.05 1/3

What You Want in seed may not be listed, but we will do our best to quote you if same is available. Your inquiries are solicited.

If our literature has interested you, we believe it will interest your friends. PLEASE SEND US THE NAMES OF SOME GOOD FARMERS. We will gladly mail this catalog to them, and your name will not be used if you prefer.

OTHER PRODUCTS FOR SALE

Registered Polled Hereford Cattle—We have the largest polled herd in the Southeastern States, averaging 250 head, and well known blood lines are represented. Many cattlemen look upon Polled Herefords as "the preferred beef breed" of today. For over 20 years we have bought our herd bulls out of leading herds in the North and West at a cost of $500 each or more. The herd is Gov-

Some of the Lambert registered polled Hereford heifers enjoying Dallis Grass. The horns are bred off. The "white face" outnumbers all other beef breeds combined.

ernment accredited. Breeding stock is for sale at all times. We have many satisfied mail order customers in seven states. Correspondence solicited. Visitors are welcome.

Pure Honey, extracted, and made bright and delicious principally from white sweet clover is for sale as long as its lasts. Delivered prices subject to market changes are: 5 lb. pail, 85c; 10 lb. pail, $1.50; and 20 lb., $2.90.

Bee Supplies—Manufactured by G. B. Lewis Co., Watertown, Wisconsin, and Dadant's Foundation, are carried in stock. This is a leading line of beeware, and is used by the Alabama Polytechnic Institute. Write us for the Lewis catalog.

TREAT BEFORE PLANTING WITH
SEMESAN
FOR DISEASE PROTECTION

DU BAY
REG. U.S. PAT. OFF.

(See page 44 for "Du Bay" information)

TESTIMONIALS

FROM OUR BANKS . . .

Camden, Alabama
Jan. 12th, 1937

"To Whom It May Concern:

"We have known and patronized R. E. Lambert & Sons, farmers and seedsmen, for a number of years and have known the members of the firm intimately. Their products have always proved to be of high grade, and our relations very satisfactory."

CAMDEN NATIONAL BANK
E. W. Berry, President

Selma, Alabama
January 11, 1937

"To Whom It May Concern:

"The firm of R. E. Lambert & Sons, Darlington, Alabama, in our opinion, has been of great benefit to the farmers and stock raisers of the South. Their reputation for fair dealing and thoroughness in business cannot be questioned.

"We believe that any transactions you might have with them will prove entirely satisfactory. We appreciate them as customers, as well as citizens of this community."

THE CITY NATIONAL BANK OF SELMA
By H. Glenn Boyd, President

FROM ALABAMA CUSTOMERS . . .

"By referring to your records, I think you will find that I have been a purchaser of fine clover and pasture grass seed from you for the past 8 or 10 years. It goes without saying that my relations with your firm have been most satisfactory."

L. W. ASHLEY, Montgomery County

"R. E. Lambert & Sons have proven themselves worthy seedsmen, soil builders, Master Farmers, and friends of farmers and pasture builders of the South." J. N. DENNIS, Chilton County

"We may say further that for several years we have had business relations, and in every instance we have found the quality of your seed and the service that you gave us to be above par and very satisfactory. We commend you as being a very capable and dependable source of supply for seeds." J. F. SUTTLE, JR., Perry County

"It gives me pleasure to advise you that I have, during the past ten years, purchased seed from you for grain, cover, and pasture crops, and have always found your service prompt, your prices right, and the quality of your seed most satisfactory. You have done a constructive work through the development of better farming and better livestock in Alabama. It has, therefore, always been a pleasure to do business with you."

ROBERT JEMISON, JR., Jefferson County

"We believe your seed very desirable for all lands belonging to us, being approximately 13,000 acres near Geiger, and we will be buying additional seed throughout the years, as we contemplate extensive improvements in our pastures, as well as more legume crops annually for our cultivated fields."

SUMTER FARM & STOCK COMPANY
O. J. Henley, Gen. Mgr., Tuscaloosa County

"I have just returned from a vacation in Texas where I saw some of the best pastures I was ever in. The pastures I refer to are located at Teague, Texas, and owned by Bib Riley, and Burt and Riley Middleton. When I was there the 15th of June, Dallis Grass was better than knee deep, and they were cutting it for hay as they had a surplus of grass. Common Lespedeza and Carpet Grass were ankle deep. They informed me that they had bought the pasture grass seed from you."

E. E. HALE, County Agent, Baldwin County

FROM ARKANSAS . . .

"I'm well pleased with the Bermuda seed I ordered from you in June. I have a good sod already set. They came up fine."

C. R. MYERS, White County

"The seed I bought from you last spring were entirely satisfactory."

NOEL WARREN, Columbia County

FROM FLORIDA . . .

Having purchased seed from your Concern, of various kinds, during the eight years I have been County Agent, in Florida, I wish to assure you that my dealings with you during that period have been satisfactory and most pleasant.

J. W. MALONE, County Agent, Jackson County

"Lambert & Sons have supplied Walton County, Florida, farmers with all kinds of seed for the past several years, which have been satisfactory in every way."

MITCHELL WILKINS, Co. Agt., Walton County

"It gives me pleasure to state that during the several years of my business dealings with you, I have found your service entirely satisfactory."

R. B. HARKNESS, M. D., Columbia County

FROM GEORGIA . . .

"We always feel safe when we trade with you because we know you are men of high character, and that we can depend on you to ship us seeds as you represent them, also that you will not fall down on your deliveries, and that you will not violate your contracts or agreements in any way."

SNELSON SEED CO., Chatham County

FROM KENTUCKY . . .

"I am well pleased with the Crolataria that I received from you. It is over four feet high now, and the early kind is already making pods. The big kind is still growing strong, and the Sesbania is doing fine. The drouth here had very little damaging effect on them."

J. STANLEY HUGHES, Woodford County

FROM LOUISIANA . . .

"Have 50 acres of Hop Clover that has made a wonderful late winter and early spring pasture. I consider it in a class by itself as a milk producer, and on good land it makes an excellent early hay crop. You cannot recommend it too highly."

GEO. L. GAYDEN, East Faliciana Parish

FROM MISSISSIPPI . . .

"I have been buying your seed over a period of ten years, and have always found them satisfactory in every way. Our business relations have been very pleasant, and I hope to continue them for many years."

W. L. DOUGLASS, Lowndes County

"It is a pleasure for us to be able to recommend the seed that you supply. We feel particularly qualified to do this due to the fact that we have bought seed of different varieties from you at least fifteen years, and have always found your seeds to be of good quality."

E. F. NUNN & CO., Noxubee County

"We have used your seed for a number of years and have found them the best, and do not hesitate to recommend your seed to any of our farmer friends."

THE PEOPLES BANK & TRUST CO.
By V. S. Whitesides, President, Lee County

"I would like to take this opportunity of expressing my satisfaction in my dealings with you.

"I have found R. E. Lambert & Sons very prompt in their shipments, and their seed of the very best quality, and these two qualities we appreciate very much in those from whom we buy our seed."

C. E. RHETT, Manager
T. J. Moss Tie Company, Lowndes County

FROM NORTH CAROLINA . . .

"We are happy to renew our many years of dealing with your firm again. It has always been a pleasure to transact business with a firm whose integrity we have always held to be so high, and whose stocks we have always found to be of a uniformly high quality and dependability."

JOB P. WYATT & SONS COMPANY
By W. Greyson Quarles, Mgr., Wake County

FROM OKLAHOMA . . .

"Your best grades of Dallis Grass seed have always come up to samples and expectations, being well cleaned and pure and satisfactory germination."

CLARKE & KELLER SEED STORE
By F. D. Keller, Pottawatomie County

"It has been a real pleasure to do business with a firm that we can have full confidence in, and we know that the seed we buy from R. E. Lambert & Sons will be as good or better than represented to be."

ROACH SEED COMPANY, Okmulgee County

"I have bought nearly all kinds of seed from you for the past six or seven years, and have found them of the highest type that could be grown. I think you are the best seed house in the South. Your business is built on honor and principle is why you cover such a wonderful territory."

HENRY R. LATIMER, McCurtain County

FROM SOUTH CAROLINA . . .

"It is a pleasure for us to write and tell you all of the various seeds we have bought from you from time to time have given our customers perfect satisfaction."

E. W. BAILEY SEED CO., Charleston County

"We own and operate a dairy farm in the lower part of this state. For a number of years we have been buying Lespedeza, Carpet Grass, Clover and other seed from you, and always we have found your seed pure and high in germination."

J. W. SMOAK HARDWARE COMPANY
By W. C. Bethea, Gen. Mgr., Orangeburg County

"I have done considerable seed business with the Lamberts. All of these transactions have been pleasant and satisfactory in every way. I especially appreciate the fact that contracts for future delivery of seed have always been fulfilled in detail though prices had advanced considerably after purchase was made. In all of my seed purchases from Lamberts, I have received entire satisfaction in QUALITY, SERVICE, and PRICE."

W. C. WHITE, Chester County

FROM TENNESSEE . . .

"For many years I have felt that it is very fortunate that in the R. E. Lambert Seed Company we have seedsmen who specialize in seeds adapted to the lower South. If it is a southern pasture, forage or soil improving crop, generally the Lambert Seed Company will have the seed for it."

L. R. NEIL, Editor
Southern Agriculturist, Nashville

FROM TEXAS . . .

"It is always a pleasure to deal with your good firm, and I hope that we can have friendly dealings to our mutual advantage for a long time in the future."

THE BENNETT RANCH, Jackson County

"I have always received prompt attention on my orders, and have found your seed to be just as represented. Your prices plus freight from a considerable distance usually are lower than those of nearer dealers plus less freight."

HOWARD HAMPTON, Red River County

"I have been purchasing farm seed from you for some ten years and have always found you dependable and satisfactory."

J. W. FITZGERALD, Smith County

WHEN YOU ARE SICK—

Do you call a doctor that is inexperienced, doesn't keep abreast of the new developments in his profession, or who you know nothing about? We dare say you do not. What about seed? Your life does not depend upon them, but your livelihood does. Are you as particular about them and their source as their importance justifies? Is your seedsman well posted, does he offer you the best seed and the most improved varieties, does he thoroughly reclean and test his seed, and is he reputable and dependable? Do you always buy from the cheapest man? We recommend the BEST DOCTOR and the BEST SEED!

Ask For

Current Quotations

We Issue Price Lists Monthly During Main Seasons

——We suggest that you keep this small catalog handy. We hope you will want to refer to it many times. We have tried to make it practical and helpful.

Under

"General Information"

(See Page 42)

PLANTING INSTRUCTIONS, INOCULATION, DU BAY DISINFECTANTS and FERTILIZATION are very important subjects. Study them for greater success and profits!

VISITORS ALWAYS WELCOME

HOW TO REACH US

Darlington post office is located on our 2300-acre farm, which lies between and near the intersection of Highways No. 10 and 11. Highway No. 11 passes through the edge of the plantation. Darlington is 10 miles east of Camden, 37 miles west of Greenville, and 40 miles south of Selma. Strangers should inquire for "Lambert's Farm." Signs are on all nearby roads.

DAVIS PRINTING CO. MONTGOMERY